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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,799	08/30/2001	Curt A. Karnstedt	5646-63	1428
20792	7590	06/10/2004	EXAMINER	
MYERS BIGEL SIBLEY & SAJOVEC PO BOX 37428 RALEIGH, NC 27627			PEYTON, TAMMARA R	
			ART UNIT	PAPER NUMBER
			2182	

DATE MAILED: 06/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

## Application No.

09/944,799

## Applicant(s)

KARNSTEDT ET AL.

## Examiner

Tammara R Peyton

## Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 19, 21-26, 28-37, 40 is/are rejected.
- 7) ☒ Claim(s) 10-18, 20, 27, 38 and 39 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/30/01.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9, 19, 21-26, 28-37 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Kumar*, (US 6,122,274)

As per claims 1, 5, 19, 21, 22, 25, 26, 28, 32, 33, 37, and 40, *Kumar* teaches an integrated circuit FIFO memory device comprising:

a FIFO memory (40'1-40'm) that is divisible into up to a predetermined number of independent FIFO queues;

a register file (10+30'1-10+30'm) including the predetermined number of words (i,j,k), a respective word of which is configured to store one or more parameters for a respective one of the FIFO queues (col. 7, lines 20-28);

an indexer (30'1-30'm) that is configured to index into the register file to access a respective word that corresponds to a respective FIFO queue that is accessed; and

a controller (50'1-50'm) that is responsive to the respective word that is accessed and that is configured to control access to the respective FIFO queue based upon at least one of the one or more parameters that is stored in the respective word. (col. 6,

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lines 33-col. 8, lines 1-8, col. 14, lines 64-col. 15, lines 1-23, col. 24, lines 44-65, col. 28-30)

*Kumar* teaches a packet switch system wherein select incoming packets are routed to independent memory modules. *Kumar* does not expressly teach a register file and indexer. However, it would be obvious to one of ordinary skill that *Kumar* teaches a method of a register file and indexer with the header processing circuit (10) and the input module (30). Specifically, both are configured to store one or more parameters in the associated with the incoming packets. Each independent memory modules each have a corresponding controller that is configured to control access to the respective memory modules. Further, it would have been obvious to one of ordinary skill that the parameter word tags i, k, j are used by each of the controller(s) for determining where to output the stored packets via the memory module(s).

As per claims 2, 29, and 34, *Kumar* teaches wherein the one or more parameter comprises counter parameters.

As per claims 3, 23, 30, and 35, *Kumar* teaches wherein one or more parameters comprise a number of words or packets read, a number of words or packets written and start and end address for the respective queue.

As per claim 4, 24, 31, and 36, *Kumar* teaches wherein one or more parameters comprise a mask value that generates a empty or full signal. (Fig.8)

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As per claims 6-9 *Kumar* obviously teaches that based on the parameters the controller is configured to control the reading and/or writing from the respective FIFO queue based on the given parameters.

***Allowable Subject Matter***

Claims 10-18, 20, 27, 38, and 39, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammara Peyton whose telephone number is (703) 306-5508. The examiner can normally be reached between 6:30 - 4:00 from Monday to Thursday, (I am off every first Friday), and 6:30-3:00 every second Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin, can be reached on (703) 308-3301. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3718. Any inquiry of a general nature of relating to the status of this application

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should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Mailed responses to this action should be sent to:

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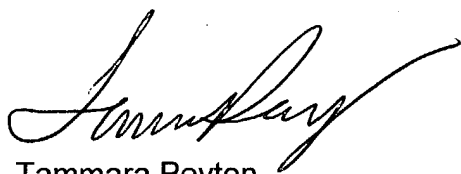
Washington, D.C. 20231.

Faxes for Official/formal (After Final) communications or for informal or draft communications (please label "PROPOSED" or "DRAFT" or "OFFICIAL") sent to:

(703) 872-9306

Hand-delivered responses should be brought to:

USTPO, 2011 South Clark Place, Customer Window  
Crystal Plaza Two, Lobby Room 1B03, Arlington, VA, 22202 Crystal Park II, 2121.



Tammara Peyton

June 8, 2003

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